## **WE CLAIM**

- A method of error retention for multi-threaded software, comprising: executing an application which uses a logger that collects log
- 5 statements:

collecting at least one log statement from at least one application thread and storing the at least one log statement in memory; and allowing the collected log statement to be persisted in case of an error in a production environment.

- 10 2. The method of claim 1 wherein the application and logger are implemented on a web application server.
  - 3. The method of claim 1 wherein the executing application is run in a development environment.
- 4. The method of claim 1 wherein the executing application is run in a test environment.
  - 5. The method of claim 1 wherein the logger is built into a base class of an object oriented application framework.
  - 6. The method of claim 1 wherein the production application is an Internet accessible application.
- 7. The method of claim 1 wherein the method can be implemented using background threads.

8. The method of claim 1 further comprising:
detecting a death of an application thread by the logger; and
deleting the application thread's log statements after thread death
detection.

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- A system of error retention for multi-threaded software, comprising: means for executing an application which uses a logger that collects log statements;
- means for collecting at least one log statement from at least one application thread and storing the at least one log statement in memory; and means for allowing the collected log statement to be persisted in case of an error in a production environment.
  - The system of claim 9 further comprising:means for detecting a death of an application thread by the logger;

15 and

means for deleting the application thread's log statements after thread death detection.

- 11. A computer readable medium storing a computer program comprising:
- computer readable code for executing an application which uses a logger that collects log statements;

computer readable code for collecting at least one log statement from at least one application thread and storing the at least one log statement in memory; and

computer readable code for allowing the collected log statement to be persisted in case of an error in a production environment.

- 12. The computer readable medium of claim 11 wherein the application and logger are implemented on a web application server.
- 13. The computer readable medium of claim 11 wherein the executingapplication is run in a development environment.
  - 14. The computer readable medium of claim 11 wherein the executing application is run in a test environment.
  - 15. The computer readable medium of claim 11 wherein the logger is built into a base class of an object oriented application framework.
- 16. The computer readable medium of claim 11 wherein the production application is an Internet accessible application.
  - 17. The computer readable medium of claim 11 wherein the method can be implemented using background threads.
- The computer readable medium of claim 11 further comprising:
   computer readable code for detecting a death of an application thread by the logger; and

computer readable code for deleting the application thread's log statements after thread death detection.